

The skin is smooth and shining, the surface under the microscope presenting the appearance of very minute curved scales. Colour fulvous. Length $\frac{1}{4}$ inch.

From what has been said it seems clear that the genus *Zia* must be added to the genera *Ligia* and *Ligidium*, which, according to Messrs. Bate and Westwood, have hitherto constituted the subfamily *Ligiinæ* in the family *Oniscidae*.

Supposing this species to have been hitherto unobserved, I venture to name it *Zia Saundersii*, in honour of an intimate and dear friend, W. Wilson Saunders, Esq., F.R.S., whose example, assistance, and encouragement have ever been at the service of the students of science, whether making the modest efforts of beginners or pursuing the most elaborate and important inquiries.

XXXII.—*Description of a new Species belonging to the Genus Vitrina.* By EDGAR A. SMITH, F.Z.S., Zoological Department, British Museum.

THE specimens upon which the present species is founded were sent by Mr. T. Kirk (Secretary of the Auckland Institute, New Zealand) to the British Museum to Professor Owen for identification, accompanied by the following note:—"The enclosed *Vitrina*-like shell I received from Sunday Island (Kermadecs) during the eruption of 1871; the two or three folks in the island partly lived on the animal."

This volcanic island, sometimes called Raoul, is one of the Kermadec group, and situated about 550 miles to the north-east of Auckland, New Zealand.

Vitrina kermadecensis.

V. testa depressa, tenuissima, pellucida, nitida, vitrea, epidermide pertenui virenti-cornea amicta, incrementi lineis levissime, prope suturam fortius, striata; anfr. $3\frac{1}{2}$, celeriter accrescentes, primi $2\frac{1}{2}$ convexiusculi, supra ultimum pauxillulum prominentes, ultimus magnus, superne vix depressus, ad peripheriam rotundatus, basi subinflatus, versus aperturam non descendens; sutura aliquanto depressa, angustissime marginata; apertura lunato-ovata, paululum obliqua, fere horizontalis; perist. epidermide duplicata incrassatum, basi recedens, marginibus approximatis.

Alt. $4\frac{3}{4}$ mill.; diam. maj. $9\frac{1}{2}$, min. $7\frac{1}{2}$.

This is a very fragile species, of a greenish horn-colour, very glossy and transparent, so much so that the outline of the body-whorl is quite apparent through the upper surface until its junction with the apex.

No spiral sculpture can be traced by using an ordinary lens,

but with the aid of a more powerful microscope very fine and numerous wavy striæ are visible on the second volution only.

The most nearly allied species appears to be *V. Strangei*, Pfr., from which the present form is at once distinguished by the different proportion of the last whorl to the others. In *Strangei* the whorls increase more rapidly, and towards the aperture the last one dilates very considerably; this is not the case in *kermadeensis*, which is more transparent, more glossy, and of a greener tint than the former.

V. dimidiata, Pfr., from New Zealand, the most nearly related species in a geographical point of view, is a very distinct form.

XXXIII.—*Observations on Chelonians, with Descriptions of new Genera and Species.* By Dr. J. E. GRAY, F.R.S. &c.

THE shells of adult Land-Tortoises (*Testudo*) have the sternum more or less deeply concave and the hinder marginal plate over the tail (hence often called the caudal plate) very broad, thick, and convex externally, and with the lower edge more or less inflected. These I believe to be the shells of males; and the few specimens of the animals that I have been able to examine confirm this idea. The other specimens have the sternum flat and the caudal plate narrower, thinner, and flat, with the lower edge more or less expanded. These have been concluded to be the females. The shells of both the adult and younger specimens have this form; and as there must be young males as well as females, I conclude that some of the young shells are those of males, and that the concavity of the sternum and the width and convexity of the caudal plate are not attained until the animal has arrived at the adult age. The concavity of the sternum differs in the various species; but in some species, as *Testudo tabulata*, it becomes very deep in the older specimens, and accompanied by a contraction of the sides of the shell. Specimens in this state were regarded by Spix as a distinct species, under the name of *Testudo Hercules*.

The sternum of some of the more terrestrial Terrapins, as *Geoemyda*, have the sternum of the adult very deeply and broadly concave; and some of the large specimens of American Box Tortoises (*Cistudo carolina*) have the sternum concave in the centre and convex behind. The rest of the specimens, and the three of *C. mexicana*, in the British Museum, which are all full-grown, have the sternum flat. It may be that we have no adult males of the latter. There is in the Museum a specimen of *Swanka* which has the sternum very flat in